

**IN THE CLAIMS:**

Please amend the claims as follows:

Claim 1 (Original): An asymmetric reaction catalyst obtained by mixing a pentavalent niobium compound and a triol or tetraol having an optically active binaphthol structure of R or S configuration.

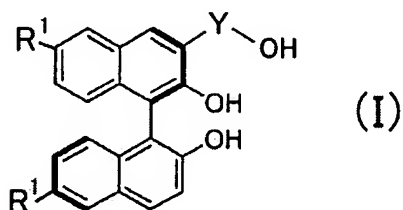
Claim 2 (Original): An asymmetric reaction catalyst according to claim 1, wherein the niobium compound is represented by the following formula:



(wherein, X is an alkoxide or a halogen atom).

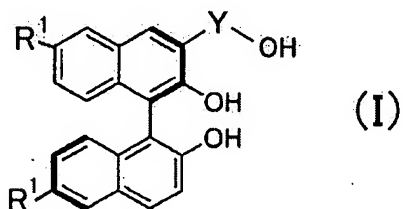
Claims 3-13 (Cancelled).

Claim 14 (New): An asymmetric reaction catalyst according to claim 1, wherein the triol is represented by the following formula (I):



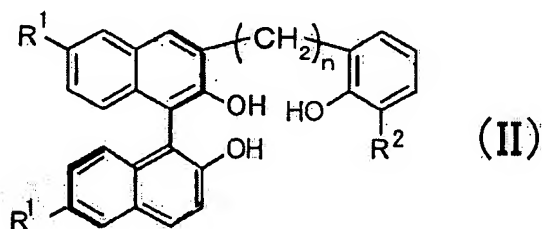
(wherein, Y represents a divalent hydrocarbon group and R<sup>1</sup> represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most four carbons, or an alkyl group or alkoxy group having at most 4 carbons).

Claim 15 (New): An asymmetric reaction catalyst according to claim 2, wherein the triol is represented by the following formula (I):



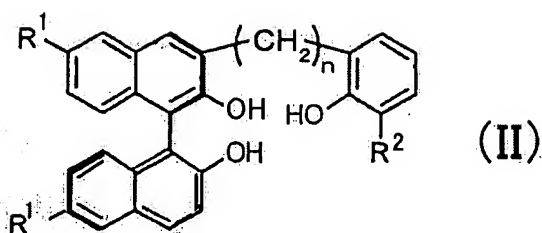
(wherein, Y represents a divalent hydrocarbon group and R<sup>1</sup> represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most four carbons, or an alkyl group or alkoxy group having at most 4 carbons).

Claim 16 (New): An asymmetric reaction catalyst according to claim 1, wherein the triol is represented by the following formula (II):



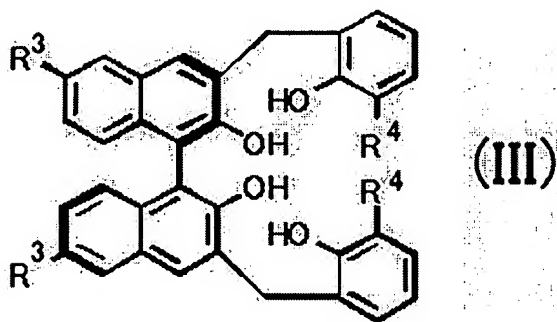
(wherein, R<sup>1</sup> represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most 4 carbons, or an alkyl group or an alkoxy group having at most four carbons; R<sup>2</sup> represents a hydrogen atom or a hydrocarbon group having 1 to 10 carbons; and n is an integer from 0 to 2).

Claim 17 (New): An asymmetric reaction catalyst according to claim 2, wherein the triol is represented by the following formula (II):



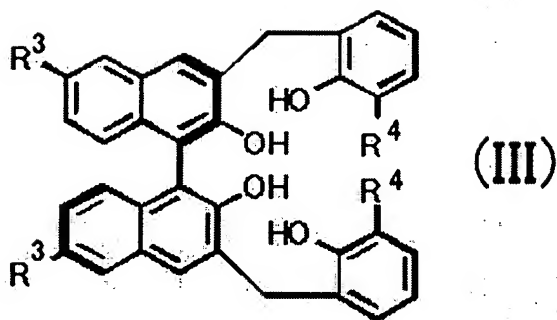
(wherein,  $R^1$  represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most 4 carbons, or an alkyl group or an alkoxy group having at most four carbons;  $R^2$  represents a hydrogen atom or a hydrocarbon group having 1 to 10 carbons; and  $n$  is an integer from 0 to 2).

Claim 18 (New): An asymmetric reaction catalyst according to claim 1, wherein the tetraol is represented by the following formula (III):



(wherein,  $R^3$  represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most 4 carbons, or an alkyl group or alkoxy group having at most 4 carbons and  $R^4$  represents a hydrogen atom or a hydrocarbon group having 1 to 10 carbons).

Claim 19 (New): An asymmetric reaction catalyst according to claim 2, wherein the tetraol is represented by the following formula (III):



(wherein,  $R^3$  represents a hydrogen atom, a halogen atom, a perfluoroalkyl group having at most 4 carbons, or an alkyl group or alkoxy group having at most 4 carbons and  $R^4$  represents a hydrogen atom or a hydrocarbon group having 1 to 10 carbons).

Claim 20 (New): A method for preparing an optically active compound, wherein a reaction substrate represented by  $R^5R^6C=N-Z$  (wherein  $R^5$  and  $R^6$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, an alkoxycarbonyl group, and a hydrocarbon group having a functional group and  $Z$  represents an aryl group or an acylamino group) and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 1.

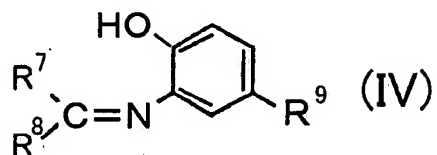
Claim 21 (New): A method for preparing an optically active compound, wherein a reaction substrate represented by  $R^5R^6C=N-Z$  (wherein  $R^5$  and  $R^6$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, an alkoxycarbonyl group, and a hydrocarbon group having a functional group and  $Z$  represents an aryl group or an acylamino group) and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 2.

Claim 22 (New): A method for preparing an optically active compound, wherein a reaction substrate represented by  $R^5R^6C=N-Z$  (wherein  $R^5$  and  $R^6$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, an alkoxycarbonyl group, and a hydrocarbon group having a functional group and  $Z$  represents an aryl group or an acylamino group) and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 14.

Claim 23 (New): A method for preparing an optically active compound, wherein a reaction substrate represented by  $R^5R^6C=N-Z$  (wherein  $R^5$  and  $R^6$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, an alkoxycarbonyl group, and a hydrocarbon group having a functional group and  $Z$  represents an aryl group or an acylamino group) and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 15.

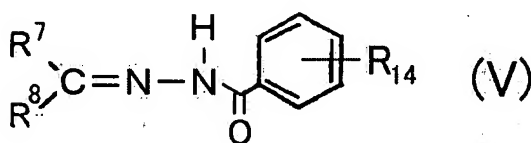
Claim 24 (New): A method for preparing an optically active compound, wherein a reaction substrate represented by  $R^5R^6C=N-Z$  (wherein  $R^5$  and  $R^6$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, an alkoxycarbonyl group, and a hydrocarbon group having a functional group and  $Z$  represents an aryl group or an acylamino group) and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 16.

Claim 25 (New): A method for preparing an optically active compound according to claim 20, wherein the above-mentioned reaction substrate is an imine represented by the following formula (IV):



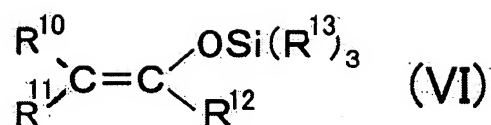
(wherein,  $R^7$  and  $R^8$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, and a hydrocarbon group having a functional group and  $R^9$  represents a hydrogen atom or a trifluoromethyl group).

Claim 26 (New): A method for preparing an optically active compound according to claim 20, wherein the above-mentioned reaction substrate is a benzoylhydrazone represented by the following formula (V):



(wherein,  $R^7$  and  $R^8$ , not being the same, are selected from the group consisting of a hydrogen atom, a hydrocarbon group, and a hydrocarbon group having a functional group and  $R^{14}$  represents a hydrogen atom or a substituent having an electron-withdrawing property).

Claim 27 (New): A method for preparing an optically active compound according to claim 20, wherein the above-mentioned nucleophilic agent is a silicon enolate represented by the following formula (VI):



(wherein  $\text{R}^{10}$  and  $\text{R}^{11}$  are each independently one selected from the group consisting of a hydrogen atom, an aliphatic hydrocarbon group, an aromatic hydrocarbon group, an alkyloxy group, an aryloxy group, and a silyloxy group;  $\text{R}^{12}$  is one selected from the group consisting of a hydrogen atom, an aliphatic hydrocarbon group, an alkyloxy group, an aryloxy group, an arylthio group, and an alkylthio group; and each  $\text{R}^{13}$ , being the same or different, represents a hydrocarbon group).

Claim 28 (New): A method for preparing an optically active compound according to claim 20, wherein an imidazole derivative is added to the reaction system.

Claim 29 (New): A method for preparing an optically active compound according to claim 20, wherein a synthetic crystalline zeolite is added to the reaction system.

Claim 30 (New): A method for preparing a optically active compound, wherein a reaction substrate and a nucleophilic agent are reacted by nucleophilic addition using an asymmetric reaction catalyst according to claim 1.

Claim 31 (New): A method for preparing an optically active compound according to claim 30, wherein the reaction substrate is an epoxide, the nucleophilic agent is a nitrogen compound, and the optically active compound is a nitrogen-containing compound.